Annual Report of the Medical Officer of Health

FOR THE

Urban Sanitary District of Camborne, Cornwall,

For the Year ending December 31st, 1909.

TO THE CHAIRMAN AND MEMBERS OF THE CAMBORNE URBAN DISTRICT COUNCIL.

GENTLEMEN.

Herewith I have pleasure in presenting to you my Annual Report on the Health and Sanitary Condition of your District for the year 1909.

SITUATION.

The Urban District of Camborne is mainly situated on the side of a hill and varies in elevation from 50 to about 600 feet above sea level, the fall generally being from the South East to the North West where it extends to the sea coast.

The town itself is built on a plateau about 400 feet above sea level.

The soil is loam and the sub-soil is clay.

POPULATION.

The population of your district at the census in 1901 was as follows:—

Ecclesiastical Distric	т.	I	AALES.	Females.	Total.
Camborne		 	3228	4295	7523
Tuckingmill		 	1416	1794	3210
Treslothan		 	1106	1277	2383
Penponds	• • •	 	730	880	1610
			6480	8246	14726

Your district contains a large working class population, the chief industries being tin mining and iron foundries.

It is more than likely that the actual population at the present date would shew a considerable increase over that of the last census, but as it is impossible to arrive at anything like a correct estimate I have taken the returns of 1901 in calculating the various statistics.



The average population of your district for the past fifty years was 14153.

AREA AND DENSITY OF POPULATION.

Your district has an area of 6744 acres and a density of population of 2.18 per acre, but as a large portion of this area is rural in character the density would vary considerably in different localities of the district.

INHABITED HOUSES

The number of inhabited houses at the last census was 3530 and of these 1810 contained less than five rooms. These returns give an average of 4:16 persons per inhabited house.

The number of inhabited houses at the end of 1909 was 3795 an increase of 265 since the last census.

BIRTHS.

The births of 181 Males and 201 Females were registered during the year, making a total of 382.

These give a Birth-Rate of 25:94 per 1000 as compared with one of 23:83 for 1908, and is the highest Birth-Rate since 1902.

The following table shows the number of Births and the Birth-Rates in your district for the previous ten years.

Date.	Births.	Birth Rate per 1,000.
1899	377	25.61
1900	396	26.89
1901 .	392	26.61
1902	385	26.14
1903	345	23.42
1904	379	25.73
1905	341	23:15
1906	335	22:81
1907	362	24.58
1908	351	23.83

These give an average Birth-Rate of 24.88 per 1000. The Birth-Rate for Cornwall for 1909 was 21.28 per 1000 as compared with 22.44 for 1908, and for England and Wales 25.6 as compared with 26.5 for 1908.

ILLEGITIMATE BIRTHS.

The total number of Illegitimate Births registered during the year was 16 and of these 5 were males and 11 females.

These give an Illegitimate Birth-Rate of 1:08 per 1000 and a proportion of 41



per 1000 Births as compared with a rate of 1:15 per 1000 and a proportion of 48 per 1000 for 1908.

DEATHS.

The deaths of 118 Males and 131 Females were registered during the year, being a total of 249 Deaths.

These returns give a Death-Rate of 16:90 per 1000 as compared with one of 16:16 for 1908.

The following table shows the number of Deaths and the Death-Rates per 1000 for the previous ten years;—

DATE.	Deaths.	DEATH RATE
		PER 1000.
1899	251	17.07
1900	269	18:29
1901	252	17:11
1902	311	21:11
1903	234	15.89
1904	240	16.29
1905	220	14.93
1906	219	14.87
1907	247	16.77
1908	238	16:16

These give an average Death-Rate of 16.84 per 1000.

The Death-Rate for Cornwall for 1909 was 14.75 per 1000, the same as for 1908, and for England and Wales 14.5 as compared with one of 14.7 for 1908.

The various ages at Deaths in your district were as follows:-

Under	1	year	• • •	45	Between	45	and	55	 28
Betwee	n i a	and 5		10	4.9	55	4.9	65	 25
,,	5	,, 15		6	<u>.</u> ,	65	2.7	75	 45
,,	15	,, 25		12	••	75	, ,	85	 27
,,	25	., 35		20		85	٠,	95	 4
,,	35	,, 45	• • •	27					

NATURAL INCREASE.

The Natural Increase of Population for 1909 is 133 giving a rate of 9.03 per 1000 as compared with one of 6.53 for Cornwall.

This natural increase is the highest since 1904.

INFANTILE MORTALITY.

The deaths of 45 Infants under one year of age were registered during the year and of these two were Illegitimate.



The various ages at death were as follows:-

Under 1	we	ek				9							
Between	1	and	2	weeks		1	Between	5 a	and	6	months		1
,,	2	,,	3	,,		1	2 *	6	,,	7	,,		5
٠,	3	,,	4	**		3	,,	7	,,	8	٠,		1
,,	1	,,	2	months		4	,,	8	,,	9	, ,	• • •	2
,,	2	29	3	,,	• • •	5	1,	9	,,	1()	,,	• • •	1
,,	3	٠,	4	,,		4	,,	10	,,	11	,,		2
,,	4	,,	5	٠,		5	• • •	11	,,	12	11		1

The causes of death were as follows:--

Prematurity	 11	Whooping Cough		1
Convulsions	 11	Diarrhœa		1
Gastro-Enteritis	 10	Hydrocephalus		1
Bronchitis	 6	Spina Bifida		į
Marasmus	 2	Cretinism	•••	1

These deaths give an Infantile Mortality Rate of 117 per 1000 Births as compared with a Rate of 145 for 1908. I am pleased to report that this is the lowest rate in your district of which I have any record.

A large proportion of the Infantile deaths in your district year by year are due either directly or indirectly to disorders of digestion and there is every reason to hope that this temporary improvement would be maintained if the mothers would realize their responsibility and exercise more care in the feeding of their infants, giving nothing but milk in one form or another, until the child is at least seven months old and avoiding the use of all starchy foods, such as bread, sops, baked flour, cornflour, biscuits, rusks, &c. until the age of nine months, and also seeing that the feeding bottles are kept scrupulously clean, avoiding the dangerous use of dummy teats and bottles with long rubber tubes which should never be used.

The following table shows the Infantile Mortality Rate in your district for the previous ten years giving an average rate of 153 per 1000 Births.

DATE.	Deaths Under One Year.	DEATH-RATE PER 1000 BIRTHS.
1899	70	185
1900	64	161
1901	48	122
1902	81	210
1903	53	153
1904	60	158
1905	41	120
1906	46	136
1907	53	146
1908	51	145



The Infantile Mortality Rate for England and Wales for 1909 was 109 per 1000 Births and, excluding 219 large towns, it was 98.

The Notification of Births Act, of 1907 has not been adopted in your district.

ZYMOTIC DEATH-RATE.

There were four deaths registered from Zymotic Diseases during the year, viz: two from Whooping Cough, one from Typhoid Fever and one from Diarrhæa.

These give a Zymotic Death-Rate of 0.27 per 1000 as compared with one of 0.74 for 1908 and one of 1.35 for 1907.

The Zymotic Death-Rate for the year is the lowest of which I have any record, the average rate for the previous ten years being 1.56 per 1000.

The Zymotic Death-Rate for Cornwall for 1909 was 0.541 per 1000 as compared with a rate of 0.579 for 1908.

INQUEST CASES.

There were 10 Inquest cases during the year as compared with 15 for the previous year. Of these cases, seven were due to Accidents and three were attributed to Natural Causes. Of the deaths due to accidents, five occurred in Mines, four being underground and one on surface, this latter being due to burns with acids. Of the others one was in an old person, death being due to shock following a fall downstairs, and the other was in a child, death being caused by shock due to burns from an unprotected grate.

PHTHISIS.

During the year there were 38 deaths registered from Phthisis, the same number as for 1908, giving a Death-Rate of 2.58 per 1000 and a percentage of 15.26 of the total deaths

The following table shews the rates for the previous ten years:

DATE.	Deaths from Phthisis.	RATE PER 1000.	Percentage of Total Deaths.
1899	22	1.40	8.70
1900	40	2.70	14.80
1901	35	2:37	13.92
1902	43	2.92	13.82
1903	42	2.85	17:94
1904	43	2.92	17.91
1905	39	2.61	17:70
1906	27	1.83	12:32
1907	39	2.64	15.78
1908	38	2.58	15:96

These give an average rate of 2:48 per 1000 and a percentage of 14:88 of the total deaths.



Of the deaths during the year 27 were in Miners, 14 being Gold Miners and 13 Tin Miners and of these deaths 19 were due to Pulmonary Tuberculosis and 8 to Fibroid Phthisis.

Of the deaths due to Pulmonary Tuberculosis, 10 were in Tin Miners, the average age at death being 42, and nine in Gold Miners, the average age being 43.

Of the deaths due to Fibroid Phthisis, 5 were in Gold Miners, the average age at death being 47, and 3 were in Tin Miners, the average age being 49. Of the remaining deaths 4 were males, one being an Engineer, one an Assayer, one a Blacksmith and one a Labourer, and the average age was 34. The remaining seven were females, the average age being 28.

You have not adopted any system of notification of cases of Pulmonary Tuberculosis, nor have you any Hospital accommodation for such cases, but in all cases of death when notified the rooms have been disinfected with Formalin.

There were five deaths registered from other Tubercular Diseases during the year.

OTHER RESPIRATORY DISEASES.

There were 30 deaths registered from other Respiratory Diseases during the year, 25 being from Bronchitis and 5 from Pneumonia. These give a Death-Rate of 2.03 per 1000 and a percentage of 12.04 of the total deaths.

OTHER DISEASES.

There were 29 deaths registered from Heart Disease as compared with 40 for the previous year. 22 from Cancer as compared with 13 for 1908, and three from Influenza as compared with six.

INFECTIOUS DISEASES.

During the year 35 cases of Infectious Diseases were notified, giving an Infectious Disease Rate of 2.37 per 1000 as compared with a rate of 2.78 per 1000 for 1908, one of 6.99 for 1907 and one of 17.5 for 1906.

This year's return is the lowest of which I have any record.

Of the cases notified 19 were from Erysipelas, nine from Typhoid Fever, five from Diphtheria and two from Scarlet Fever.

The Infectious Disease Rate for Cornwall for 1909 was 2.97 per 1000.

TYPHOID FEVER.

Nine cases of Typhoid Fever with one death were notified during the year, giving a Disease Rate of 0.61 and a Death Rate of 0.06 per 1000, as compared with a Disease Rate of 0.27 and a Death Rate of 0.06 for 1908.

The first two cases were notified in June at Victoria Street and Union Street, and the latter of these was removed to the Isolation Hospital for treatment.



The next case occurred in July at Treswithian Downs, and the next two cases in August at William Street (in a postman), and at Penponds. This latter case was a young girl, and the disease proved fatal. The next three cases were in October, one at Croft Mitchell and the other two at Treswithian Downs in one house.

The last case, notified in November, was also in the same house at Treswithian Downs, and the three cases were removed to the Isolation Hospital.

At the premises in Victoria Street I found a defective pan in the W.C. and no ventilator to the soil pipe, and the consequent escape of sewer gas into the house. This probably had something to do with the origin of the disease.

The first case notified at Treswithian Downs was in a young man employed at the Sewage Outfalls at Rosewarne and he possibly contracted the disease there. The other two cases at Treswithian Downs, in the mother and sister, were no doubt infected from him. In the other cases no apparent cause for the disease could be determined.

In all eases explicit directions were given as to the disinfection and disposal of the excreta, and where they existed the midden pits were cleared out and disinfected.

DIPHTHERIA.

Five cases of Diphtheria were notified during the year, but there was no death from this disease. These cases give a Disease Rate of 0.33 per 1000, as compared with a Disease Rate of 0.27 and a Death-Rate of 0.13 for 1908 and a Disease-Rate of 0.54, and a Death-Rate of 0.20 for 1907.

The first case occurred at Tehidy Road in April, and the next at Edward Street, Tuckingmill, in May. In both these places there were large uncovered midden pits at the rear of the houses. Those at Edward Street, where there was also a case in the same house in August of 1908, have since been converted into W.C.'s.

The next case notified was at Treswithian in July, and here I could find no cause for the attack.

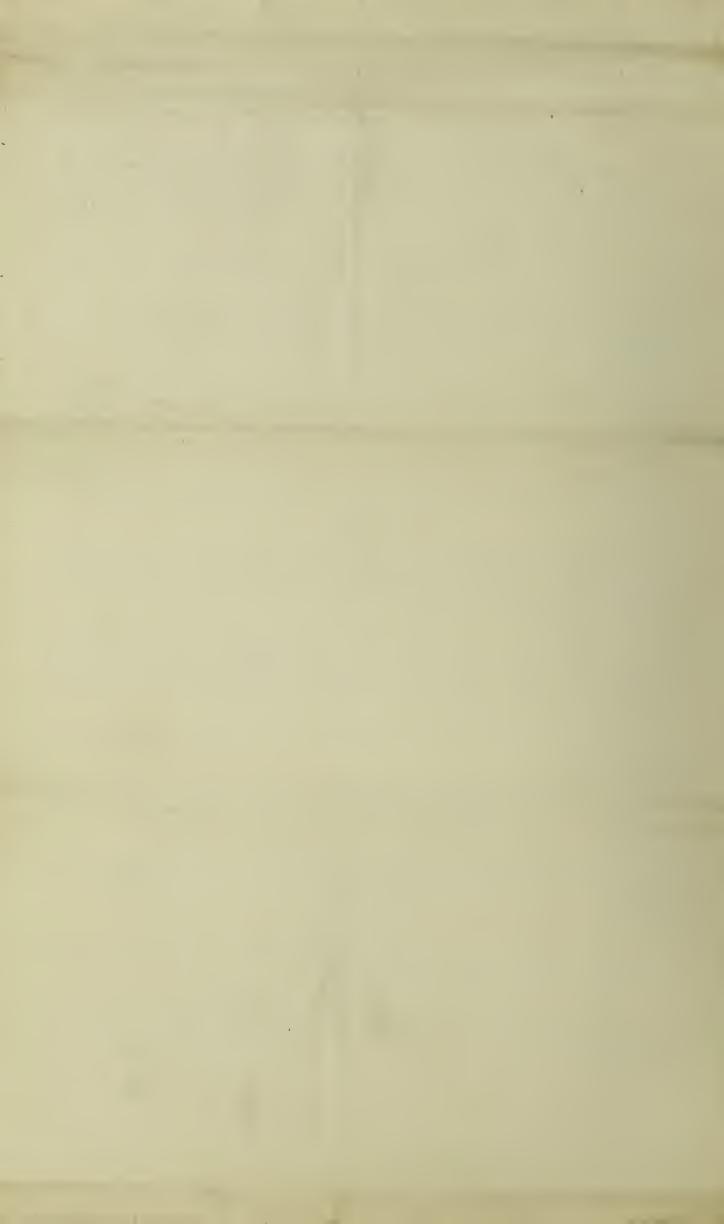
The next case was at Great Wheal Seton in November, and here great complaint was made as to the smell arising from the Sewage Outfall at Tuckingmill, some 300 yards away, more particularly when the wind was blowing from that direction.

The last case was also in November at Mount Pleasure, and here there was also an uncovered midden pit and accumulations of house refuse in close proximity to the dwelling.

SCARLET FEVER.

Two cases of Scarlet Fever were notified during the year, one at Pendarves Road in January, and one at Chycarn Moor in May.

These returns are the lowest of which I have any record and give a Disease-Rate of 0:13 per 1000 as compared with one of 1:42 for 1908, one of 4:82 for 1907 and one of 13:17 for 1906.



ERYSIPELAS.

Nineteen cases of Erysipelas were notified during the year, with one death, in a man 66 years of age.

These give a Disease-Rate of 1.29, and a Death-Rate of 0.06 per 1000.

MEASLES.

Measles were very prevalent during the latter part of the year. The epidemic commenced in September amongst the scholars attending the Infant School at Roskear, being imported from the village of Brea, and, first affecting the children residing at Tuckingmill and Roskear, it rapidly spread over most of the district, with the exception of Troon, and was present in an epidemic form for the rest of the year. Most of the cases, however, were of a mild type and there was no death registered from the disease.

Owing to its great prevalence amongst the scholars, the Infant School at Roskear was closed for four weeks in October, and the Roman Catholic School at Beacon Hill for three weeks in the same menth, and before they were reopened the schools were disinfected. This closure, however, had but little apparent effect in arresting the progress of the epidemic and consequently I did not think it advisable to recommend the closure of any of the other schools in your district.

WHOOPING COUGH.

Whooping Cough was very prevalent over nearly the whole of your district from February to June, and two deaths in infants were registered from this disease, giving a Death-Rate from Whooping Cough of 0.13 per 1000.

With a view to checking the spread of the disease the Elementary School at Penponds was closed in February for three weeks, and the Infant School at College Street in May for a similar period.

INFLUENZA.

There were several mild cases of Influenza during the year and three deaths were registered from this disease, two of them being in persons over 65 years of age.

ANKYLOSTOMIASIS.

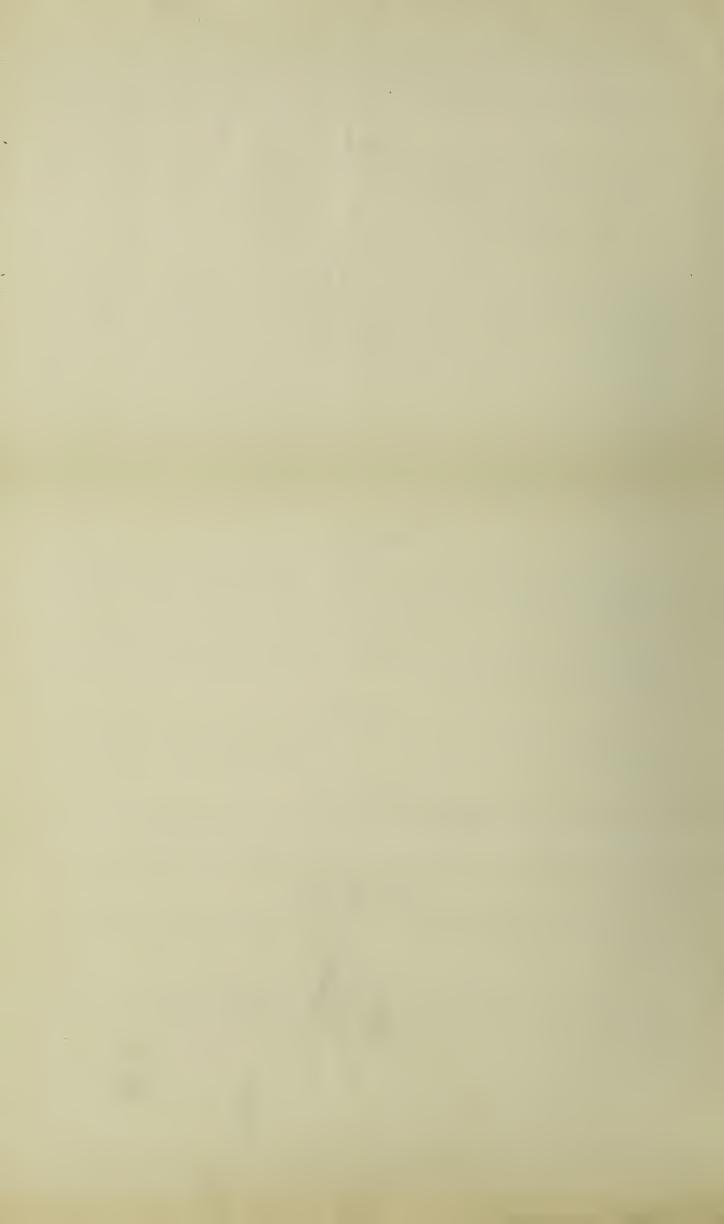
A few cases of Ankylostomiasis have been brought to my notice during the year, but the number of cases are undoubtedly decreasing and the disease would be ultimately stamped out if the Home Office Regulations for its prevention were strictly observed.

PUERPERAL FEVER.

There were no cases of Puerperal Fever notified during the year, nor was any death registered from this disease.

VACCINATION.

During 1908, the latest period for which returns are at present available, of 351 Births, 251 were Vaccinated, 42 died unvaccinated, 51 were exempted and seven were postponed.



Excluding those that died unvaccinated and those postponed these returns give a percentage of 83:11 as compared with one of 90:15 for 1908 and one of 96:9 for 1907, an unsatisfactory decrease which, if it continues, must give believers in the efficacy of vaccination occasion for serious thought.

ISOLATION HOSPITAL.

The Isolation Hospital was used during the months of June and July, October and November, for the treatment of four cases of Typhoid Fever. No deaths occurred in this Hospital during the year.

DISINFECTION.

The Disinfector at West Tolgus was used on five occasions during the year and 22 private houses were disinfected with Formalin.

ELEMENTARY SCHOOLS.

I have inspected the Public Elementary Schools in your district and, with one exception, have found them satisfactory. I had occasion during the year, to draw your attention to the unsatisfactory sanitary condition of the Elementary Schools at Penponds, and also had communications with the Local Education Authority on the matter. These schools are shortly to be closed and I understand plans are in preparation for the building of new schools for children from this village and the adjoining village of Barripper.

The Medical Inspection of children in the Public Elementary Schools in your district is carried out by a Medical Officer appointed by the County Education Authority, there being two Medical Inspectors for the County of Cornwall.

DRAINAGE.

During the year the drains of 65 Houses have been connected with the main sewers, and the drains of 21 others have been repaired and put in order.

The main drains have been periodically flushed and disinfected with Izal.

In all 514 feet of drain pipes have been laid down, but there has been no extension of the main sewers.

I regret to have again to report that no progress has been made towards the drainage of Beacon, Wheal Gerry, Hughville Street, and portions of Roskear Row and Pengegon, and the extension of the main drain at Mount Pleasant Road. These portions of your district are badly in need of efficient drainage and it is sincerely to be hoped that this important matter will not be much longer delayed. It has been held in abeyance until some definite decision has been arrived at as regards the disposal of the sewage in your district.

No flushing tank has as yet been provided for the village of Barripper, the flushing of the drains here being entirely dependent on the ordinary rainfall.



SEWAGE OUTFALLS.

I regret to have to report that practically no progress has been made since my last Annual Report as to the disposal of the sewage in your district and the various sewage outfalls are still in a most unsatisfactory condition.

The chief landowners in the district have been consulted, but are apparently not inclined to materially contribute towards the cost of conveying the sewage to the North Chiffs. Your Sanitary Committee have had the matter under their consideration from time to time during the year, and your Surveyor has laid before them an alternative scheme, which purposes discharging the sewage into the Red River at Reskadinnick, after preliminary filtration in filter beds.

A small filter on the lines suggested is now working and the effluent from the same is to be forwarded to experts for analysis.

It is sincerely to be hoped that some scheme will very shortly be adopted by your Authority and submitted to the Local Government Board for their approval. The present condition of things demands your earnest attention and as the matter has to be taken in hand sooner or later nothing can possibly be gained by further delay.

SCAVENGING

The various midden pits and ash pits in the town itself, and at Troon, Tuckingmill, Pengegon, Beacon and Wheal Gerry, have been systematically cleaned out by your Authority, and 4976 loads of manure and refuse removed from the vicinity of dwellings.

Twenty one middens have been connected into Water Closets and five new Water Closets provided in connection with private dwellings.

Your Council fully recognise the disadvantages of the midden system and that it is contrary to all sound principles of Public Health, and it is your aim to gradually convert all existing middens into Water Closets where feasable. In all new dwelling houses Water Closets have to be provided when water for flushing is available, and the sewers are within the required distance.

Where these conditions do not obtain and middens have to be constructed the observance of your Bye-Laws on this matter should be strictly enforced, so as to avoid risk of pollution of the surrounding soil and the accumulation of large quantities of excreta and other refuse in close proximity to dwellings. Many large uncovered midden pits still exist in different parts of your district, and the reconstruction of these in strict accordance with your Bye-Laws should be systematically carried out.

As regards Nuisances, 94 Notices were issued and 475 Nuisances abated.

NEW BUILDINGS.

During the year 83 plans for New Houses were approved by your Council and Certificates for occupation for 92 new houses were granted. Of these latter 66 were provided with water closets and the remainder with middens. Several of these middens



erected at Wheal Gerry Lane, Enys Road and Hughville Street, are only temporary and they have to be converted into water closets as soon as the main drain is brought within the required distance.

HOUSE ACCOMMODATION.

The adequacy of the house accommodation in your district for the working classes has certainly shewn a material improvement during the past two years, but in my opinion small houses to let at say £5 to £6 a year are still required.

While the existing condition of things obtain however, it is most improbable that any private individuals could erect such dwellings to let at such a low rental without a financial loss on the outlay.

During the year six houses at Buckshead were condemmed as being in their present condition unfit for human habitation.

WATER SUPPLY

Owing to the prolonged drought in the summer there was a great scarcity of water for domestic purposes over most of the area of your district supplied by the Camborne Water Co., and more particularly during the months of August and September.

So many were the complaints as to the inadequate supply that your Sanitary Committee had an interview with the Directors of the Water Co. at the end of August, and received assurances from them that they were doing all they could to cope with the difficulty and were carrying out further important schemes to prevent any similar condition of things in the future.

Towards this object the following is a summary of the work carried out by them during the past year.

AT Boswyn:

A ferro-concrete reservoir of the capacity of 4,000,000 gallons has been built and is being filled with water.

Two Candy Patent Filters capable of mechanically filtering all the Boswyn water have been erected. An additional stream, which yields a considerable quantity of water during about eight months of the year, has been acquired.

AT KITTY'S LANE:

Considerable progress has been made towards the construction of a ferro-concrete town service reservoir of 1,000,000 gallons capacity. To supply this a new 9 inch main has been laid from Boteto to the reservoir via Killivose.

The town and district will be automatically supplied from this reservoir by an eleven inch main, which is now being laid via Beacon Hill. This will ensure a constant and uniform pressure on the main service.

A supplementary six inch main has been laid from Roskear Villas to the end of Pendarves Street, Tuckingmill.



A four inch main has been laid throughout the village of Beacon, and the four inch main in College Street has been renewed. The Water Co. hope by these means to keep up a constant and uniform supply of water for all purposes over the whole of the area supplied by them.

SLAUGHTER HOUSES.

There are 13 Slaughter Houses registered in your district. These have been frequently inspected and found in a fairly satisfactory sanitary condition.

No carcases or parts of carcases intended for human consumption have been condemned for tuberculosis.

It is no doubt highly desirable that if possible a Public Slaughter House should be erected in your district, where all meat intended for human use could be regularly inspected by a qualified Veterinary Inspector. The consideration of the feasibility or otherwise of this should not be lost sight of by your Council.

DAIRIES, COWSHEDS AND MILKSHOPS.

There are now 46 Dairies, Cowsheds and Milkshops registered in your district, but the condition of many of them is far from satisfactory.

With a view to the material improvement of the existing state of things, copies of the Regulations made under the Dairies, Cowsheds and Milkshops Orders of 1885 and 1886, have been sent to all of those registered, and I trust your Sanitary Committee will shortly make a systematic inspection of all of these and see that these regulations are enforced, for the importance of a pure milk supply can hardly be exaggerated.

The attention of the public should be again called to the paramount necessity of sterilizing all milk, particularly that used for infants and young children. This applies with great force in this district, where I am sorry to say, hand feeding by the mothers is the rule rather than the exception.

BAKEHOUSES.

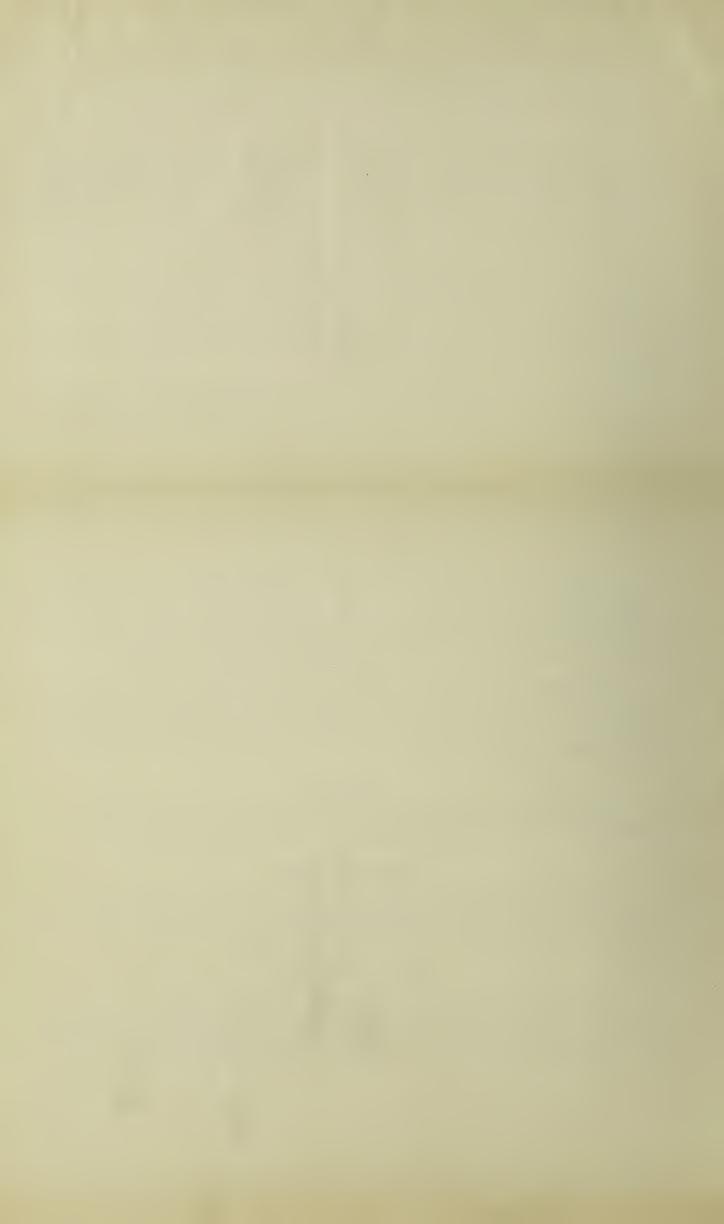
There are seven Bakehouses registered in your district, and these have been frequently inspected and found satisfactory. There are no underground Bakehouses.

COMMON LODGING HOUSES.

There is only one Common Lodging House registered in your district. This has been frequently visited during the year and is kept in a fairly satisfactory condition. No cause of infectious disease has occurred there during the year.

MEAT AND FISH MARKETS.

The Meat and Fish Markets have been inspected every week by your Sanitary Inspector. No action has been taken under the Sale of Food and Drugs Act, nor has any action been taken under Section 117 of the Public Health Act of 1875.



OFFENSIVE TRADES.

There are no Offensive Trades carried on in your district.

No case of Lead, Arsenic or Phosphorus poisoning nor of Glanders, Anthrax or Hydrophobia has, as far as I can ascertain, occurred.

BURIAL GROUNDS.

The state of the various Burial Grounds in your district, which are six in number, is satisfactory.

BYE-LAWS.

The following Bye-Laws are in existence in your district:-

New Streets and Buildings. Slaughter Houses

Nuisances. Common Lodging Houses,

Public Wash Houses. Hackney Carriages.

These are undergoing final revision by your General Purposes Committee prior to their being submitted to the Local Government Board for their approval.

FACTORY AND WORKSHOPS ACT, 1901.

There are 60 Workshops in your district coming under this Act. They have all been inspected. In one or two cases sufficient sanitary accommodation has not been provided. The attention of the owners has been called to this and the provisions of the Act are being complied with.

I am, Gentlemen, your obedient servant,

J. TELFER THOMAS,

Medical Officer of Health.

Camborne, February 25th, 1910.



SUMMARY

OF

VITAL STATISTICS

FOR 1909.

Population (Census 1901) 14,726. Area—6,744 acres. Density of Population—2:18 per acre. Inhabited Houses— 1901-3530. 1909—3795. Birth-Rate—25.94 per 1000. Cornwall—21:28 per 1000. England and Wales—25.6 per 1000. Illegitimate Birth-Rate—1:08 per 1000. Death-Rate—16:90 per 1000. Cornwall—14.75 per 1000. England and Wales—14.5 per 1000. Natural Increase—133. Rate—9:03 per 1000. Cornwall—6.53 per 1000. Infantile Mortality Rate-117 per 1000 Births. " England and Wales—109 per 1000 Births Zymotic Death-Rate—0.27 per 1000. Cornwall—0.54 per 1000. Infectious Disease-Rate—2:37 per 1000. Cornwall—2.97 per 1000. Phthisis Death-Rate—2:58 per 1000.

